

**Table 1:** Comparison of *C. palmata* and *C. polycarpa*

Sl. No.	Important features	<i>C. palmata</i>	<i>C. polycarpa</i>
1.	Leaf	Numerous	5-7
2.	Flower colour	Yellow	White or greenish-white
3.	Carpel	10-15, oblong, base gibbous	30-60, falcate-oblong, laterally compressed, base deltoid-gibbous
4.	Follicle	Obliquely obovate, c. 9.0x4.5 mm	Dorsally keeled, suprabasal deltoid gibbous
5.	Projection on carpel base	Absent	Present

Terrestrial, erect herb, up to 55 cm tall; stems with few branches or simple, glabrous. Leaves 5-7, both rosette and cauline, palmately tripartite; lamina 4-6 x 6-9 cm, mid-lobe rhombic, 3-fid; laterals obliquely flabellate, unequally 2-parted; apex acute, margin incised-serrate, glabrous on both the surfaces; petioles 7-14 cm long, auriculate at base; auricles c. 1.5 cm long. Flower solitary, terminal, 1.8-3.0 cm diam., borne on c. 1.5 cm long pedicel; sepals petaloid, obovate-

elliptic, 0.9-1.6 x 0.5-0.9 cm, white to greenish-white, glabrous; petals absent; stamens 15-20; filaments filiform, 3-7 mm long; anthers linear-oblongoid, 2.0-2.5 mm long, latrorse; carpels 30-60, falcate-oblong, 4-5 x 1 mm, laterally compressed; base deltoid-gibbous, sparsely papillose; style short, c. 1 mm long, recurved. Follicles 30-60, each 7-10 mm long with 1.5-2.0 mm long persistent style; projection distinct on dorsal surface.

**Specimen Examined:** North Sikkim, Zemu Valley, between Log Bridge and Jakthang, 3,000 m, 13.vi.1999, Maity & Maiti 21373-BSHC.

**Flowering & Fruiting:** June-August.

**Distribution:** INDIA: Sikkim; China, Taiwan, Japan, Formosa.

Grows on the forest floor, open grassy slopes in temperate forest between 1,800-3,000 m.

**Note:** In our specimen the number of carpels is about 30 and the deltoid-gibbous base is sparsely papillose.

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### 17. *TRICHOSANTHES LOBATA* ROXB. (CUCURBITACEAE) — A NEW RECORD FOR GARHWAL HIMALAYA, INDIA

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The genus *Trichosanthes* (Cucurbitaceae) is represented by 22 species in India, and is distributed mainly in the tropics and sub-tropics (Chakravorty 1982). *Trichosanthes lobata* Roxb., closely allied to *T. cucumerina* L., is reported from Andhra Pradesh, Tamil Nadu, Uttar Pradesh and West Bengal. However, so far, there is no record of its occurrence from Uttarakhand (Uniyal *et al.* 2007). Floristic records from north-west Himalaya (Hooker 1872-1897; Duthie 1903-1929, 1906; Babu 1977; Raizada and Saxena 1978; Naithani 1984-1985; Gaur 1999) have no mention of this species from this part of the country.

During plant collections in the Alaknanda valley, the authors collected the species from open sloppy fields near the

road side in the third week of August, 2008. The voucher specimen is deposited in the Herbarium, Department of Botany, H.N.B. Garhwal University, Srinagar, Garhwal (GUH).

The diagnostic characters, locality, field number and notes are given below:

*Trichosanthes lobata* Roxb. *Fl. Ind.* 3: 703.1832: Kurz in *J. As. Soc. Beng.* 46(2): 98. 1877; Clarke in Hook. f. *Fl. Brit. Ind.* 2: 610. 1879; Kundu in *J. Bombay Nat. Hist. Soc.* 43: 373. 1943.

**Diagnostic Characters:** Extensive climber, stems slender, sulcate. Leaves entire, 5-lobed, denticulate; petioles up to 8-10 cm long, puberulous; lamina 16-18 x 14-16 cm, membranous, suborbicular, base deeply cordate, slightly

puberulous on both surfaces. Tendrils trifid, divided about the middle.

**Male flowers:** In racemes, minutely bracteate, peduncles 18 to 20 cm long, slender, puberulous, 6-10 flowered; lower flowers arranged distantly, upper condensed. Pedicel 2.0-2.5 cm long, slender, calyx-tube 2.0-2.5 cm long, corolla fimbriate, without projections 1.0 x 0.3 cm. Stamens 3, inserted in the calyx tube, adnate, synandrous; anther lobes 0.3 cm x 0.1 cm; filaments free, 0.1 cm in length. Pollen grains 3-zonicolpate (pollen grains with compound aperture, 3 porate colpi), sub-prolate (58.6 x 68.0  $\mu$ ); exine 3.5  $\mu$  thick, reticulate.

**Female flowers:** Solitary, axillary, minutely bracteate; pedicel 1 cm in length; flower length 4.0-4.5 cm; calyx-tube 3.0-3.5 cm, corolla tube 1.4 cm; ovary 1.5-1.8 cm in length, covered with minute hairs; style long 1.5 cm; stigma trifid, 0.3 cm long. Fruits 18-22 x 12.0-14.5 cm; pedicel 1 cm; fruit surface glabrous; linear-oblong, streaked with white-green colours; green streaks 1.5 cm broad, white streaks 0.5 cm at

base towards stalk. Seeds packed in bright red orange pulp, ellipsoid, 12-15 x 6-8 mm and 2.0-2.5 mm thick, flat, surface rugulose, margin denticulate, tubercled, truncate at the apex, much compressed at base.

**Flowering and Fruiting:** July-September.

**Ecology:** Occasional, along the wet edges of sloppy fields. Frequently associated with *Trichosanthes cucumerina*, *Coccinia grandis*, *Ampelocissus latifolia*, *Cassia tora*, *Murrya koenigii*, *Zizyphus mauritiana*, *Lantana camara*, *Euphorbia hirta* and *Physalis divaricata*.

**Specimen Examined:** Srinagar, GUH 2910

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#### 18. REDISCOVERY OF *HUGONIA MYSTAX* LINN. (LINACEAE) FROM MAHARASHTRA, INDIA

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*Hugonia myst* Linn. Sp. Pl. 675 1753; Dalz. & Gibs. *Bombay Fl.* 17, 1861; Masters in Hook.f. *Fl. Brit. Ind.* 1:413, 1875; Cook, *Fl. Pres. Born.* 1:156, 1901; Talbot, *Trees Bombay* 28, 1902; Wight., II. 02, 1840.

“Modira-Canni” Rheede, *Hort. Mal.* 2: 29-30, t. 19, 1679.

A rambling scandent shrub; branches yellow-tomentose, with short horizontal branchlets, leafless below and provided near the ends with a pair of circinate hooks. Leaves 4-6 by 2.5-4 cm, elliptic-obovate, obtuse or subacute, entire, reticulately veined, the veins conspicuous on both the

surfaces, glabrous, base tapering; petioles 2 mm long, hairy; stipules lanceolate-subulate. Flowers at the extremities of the short branchlets 2.5-3 cm across, terminal and in the upper axile; pedicels short 1-flowered, clothed with soft yellow hairs. Sepals 7 mm long, ovate-lanceolate, acute, fulvous-pubescent. Petals many times longer than the sepals, thin, ovate-oblong, acute or truncate. Styles longer than the stamens; stigmas capitate. Drupes about 9 mm in diameter, globose, surrounded by the persistent sepals; bright red after maturity; pulp scanty; stone bony, grooved, 10-celled, with usually 2 or 3 seeds.